CONSTITUENTS:

CLAIMS/RESPONSES

CLAIM: Tobacco smoke constituent levels should be printed on tobacco packs and in advertisements, or otherwise published, to protect the consumer.

RESPONSE: Such labeling would suggest that tobacco smoke constituents have been shown to be harmful. However, it has frequently been pointed out that although tobacco smoke constituents may be among the most heavily researched substances in the world, no constituent, as found in cigarette smoke, has been scientifically proven to cause cancer or any other human disease.[1] Even anti-smoking reports have conceded this.[2]

Reported constituent levels may be of limited value since the laboratory machines used to measure smoke constituents cannot duplicate the way humans smoke -- no two smokers smoke the same way and no smoker smokes the same way all the time. These testing difficulties have been acknowledged by the U.S. government.[3]

Constituent information may also be counterproductive from the point of view of those who argue that smoking is harmful. They would claim that these data help consumers

switch to lower yield brands. However, in Sweden, young people reportedly used this information to select the "strongest" brands, i.e., those with the highest yields.[4]

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3. Gordon, R.T., "Barclay 1mg Claim Invalid, FTC Decides," Advertising Age, June 28, 1982.

4. Antoni F., Quoted in "He Warns Us of Smoking . . . and is a Heavy Smoker Himself," Hudikavallstidningen, Sweden, March 29, 1980.

CLAIM: Tobacco countries sell cigarettes in developing countries which have higher "tar" and nicotine yields than the same-brand cigarettes sold in western countries.

RESPONSE: This is not an accurate statement. Constituent levels of same-brand cigarettes generally are much the same wherever they are sold. A report of the evaluation of the "tar", nicotine and carbon monoxide yields of 50 brands of cigarettes available in 10 developing countries, issued by the World Health Organization, concluded that the constituent levels of cigarettes in those countries were very similar to those available in North America, Great Britain, and Europe.[1]

In those cases where cigarettes are manufactured for export, manufacturers try to make the export product identical to the comparable brand sold in the country of origin for numerous reasons, including economies of scale which are such that it simply does not make sense to produce different versions of the same product for different markets. Manufacturers of cigarettes, like manufacturers of other products, also must insure that their customers get the same product worldwide or else run the risk of losing their loyalty and support.

Smokers, like any other consumer, want to be able to depend on consistent product quality.

There is a second category of product available in overseas markets, however, that may present a somewhat different situation. Those are international trademark brands which are made under license by local manufacturers. As the licensors, international manufacturers endeavor to have their brands made locally meet the same standards as those made in the country of origin. Nevertheless, their ability to control local manufacturing standards is understandably less in such situations. There are a number of reasons for this, including local laws and regulations which limit the amount of imported tobacco that can be used in locally made cigarettes and local trade preferences. For example, in the Philippines, international cigarette brands are produced by local licensees and, because of local law, are required to include a high percentage of locally grown tobacco; the use of local leaf results in a slightly higher "tar" and nicotine content than comparable brands manufactured and sold in the country of origin.

On the other hand, in some instances, brands sold in export markets may actually contain less "tar" and

nicotine than locally made brands. For example, the highest "tar" levels for cigarettes made in the United States are around 16 milligrams (mg.), while in Japan, Seven Stars Filter, a popular local cigarette brand, has 19.3 mg., and in Hong Kong, Good Companion has 18.3 mg. In fact, the average "tar" and nicotine levels of the cigarettes available to foreign consumers have actually decreased in some cases when American cigarettes become available.[2]

International cigarette manufacturers comply fully with local requirements regarding "tar" and nicotine levels. These include countries that have established upper limits on the "tar" and nicotine deliveries of cigarettes sold, such as Saudi Arabia, and countries which require the manufacturer to indicate the "tar" and nicotine deliveries on the cigarette products. Hong Kong, for example, utilizes a system similar to the one used in Great Britain, which defines "ranges" of "tar" and requires cigarette manufacturers to designate the "range" in which a particular brand falls on the package.

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2. Whitley, C.O., Statement, Re: "Tobacco Issues (Part 1)." In: Hearings Before the Committee on Energy and Commerce, Subcommittee on Transportation and Hazardous Materials, One Hundred First Congress, First Session, United States House, pp. 628-644, July 25 and September 13, 1989.

CLAIM: There are cancer-causing agents in tobacco smoke and that must explain the association between smoking and cancer.

RESPONSE: Researchers have been trying for many years to determine whether constituents of tobacco smoke cause human disease. Because of such studies, tobacco and tobacco smoke constituents may be among the most heavily researched substances in the world. However, after years of intensive research, no constituent as found in cigarette smoke has been scientifically proven to cause cancer or any other human disease.[1]

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CLAIM: It is well-known that "tar" is harmful to the smoker.

RESPONSE: "Tar" is an artificially created laboratory product consisting of highly concentrated and physically altered cigarette smoke particulate matter which is collected either by passing cigarette smoke through a cold trap at extremely low temperatures or by using filters and a drying process. The substances as found in "tar" are not found in cigarette smoke. A United States government report on smoking and health acknowledges that such mechanical processes hardly duplicate the way humans smoke.[1]

Apparently, concern about "tar" is largely due to early experiments which involved painting this artificially produced substance on the skin of laboratory animals. The scientific value of such experiments has, however, been questioned for numerous reasons, including the fact that the skin of test animals is much different from the human lung tissue and because the quantities of "tar" used were unrealistically high.[2]

It is misleading, therefore, to draw definitive conclusions about "tar" and human disease from animal skin painting experiments.

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CLAIM: One hears a lot about nicotine and carbon monoxide. They must be the dangerous elements in tobacco smoke.

RESPONSE: Such claims are not based on scientific fact.

Nicotine is rapidly eliminated from the body. Even the 1964 United States Surgeon General's Report conceded that nicotine "probably does not represent a significant health problem."[1] The 1983 United States Surgeon General's Report, which focused on cardiovascular disease, also conceded that "the evidence for and against a primary role for nicotine in the development or acceleration of atherosclerosis is not conclusive, ..."[2] Similarly, other scientists have described nicotine as having no known or cumulative effects on human health.[3]

People are exposed to carbon monoxide (CO) from various sources, such as automobile exhaust fumes and industrial emissions every day, regardless of whether or not they smoke. However, it is the CO in cigarettes which has received considerable attention in the scientific literature, usually in regard to cardiovascular disease. Despite this attention, however, the issue of what role, if any, the small amounts of CO in tobacco smoke may have in disease causation has not been determined. Even

the 1983 U.S. Surgeon General's Report conceded that there is no consensus in the scientific literature regarding the role, if any, of CO and heart disease.[4]

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CLAIM: There are many substances in cigarette smoke. Even if "tar," nicotine and carbon monoxide don't cause disease in smokers, one or more of those other substances most likely do.

RESPONSE: Probably because efforts to establish that "tar," nicotine and CO cause human disease have been unsuccessful, some anti-smoking advocates have attempted to shift public attention to other substances in cigarette smoke, like arsenic and hydrogen cyanide. While these and many other substances are reportedly present in tobacco smoke, such claims fail to point out that the vast majority of those substances, some of which have been identified in "tar," are present only in extremely small amounts. As is the case with "tar," nicotine and CO, these minute quantities of other substances, as found in cigarette smoke, have not been proven to cause cancer or any other human disease.

Furthermore, these claims fail to point out that these substances are also present in the air we breathe, the water we drink, and even the food we eat. That is because these substances are for the most part the natural by-products of combustion of any organic matter, including tobacco, or are found in any organic matter whether or

not it is burnt. For example, arsenic is a naturally occurring metal that is also present in rocks, water, and virtually all living organisms in very tiny concentrations. However, even the 1982 U.S. Surgeon General's Report noted that the view that inorganic arsenics cause lung cancer has not been widely accepted.[1]

Likewise, hydrogen cyanide is also generated by the combustion of carbon materials in the air, for example, during home cooking. Moreover, it is used in a variety of industrial processes and is present in such food products as lima beans, soy beans and apricots. It has even been detected in certain wines.[2] A researcher who has examined the literature on this subject recently concluded that what effect the hydrogen cyanide in cigarette smoke has, if any, on humans remains to be determined.[3]

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3. Huber, G.L., "Physical, Chemical, and Biologic Properties of Tobacco, Cigarette Smoke, and Other Tobacco Products," Seminars in Respiratory Medicine 10(4): 297-332 (at 312), October, 1989.

CLAIM: There is benzene in cigarette smoke. When benzene was detected in Perrier water, it was withdrawn from grocery shelves. If benzene in Perrier water is harmful, then benzene in cigarette smoke must be harmful too.

RESPONSE: While it is true that benzene has been reported to be present in the vapor phase of cigarette smoke, the levels are said to be very small. Furthermore, although benzene has sometimes been suggested as a possible cause of leukemia, that disease has not been related to cigarette smoke in any consistent fashion in the various statistical studies that form the primary basis for criticism of smoking.[1] Even the U.S. Surgeon General has noted that "no dose-response relationship has been established between death rate from leukemia and number of cigarettes smoked."[2]

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CLAIM: Cigarette advertising certainly seems to imply that the newer, "lighter" cigarette brands are safe for people to smoke.

RESPONSE: The tobacco companies make no such claim. Low "tar" and nicotine cigarettes are on the market in response to consumer demand, which has increased in recent years. That demand appears to have developed as a result of the attention those products have received in the media. It certainly is consistent with consumer preferences for other "lighter" products now on the market, such as low-calorie beers, sugar-free soft drinks, low fat foods, and the like. Because of those changes in consumer preferences, tobacco manufacturers have modified their production and shifted their emphasis in advertising.

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